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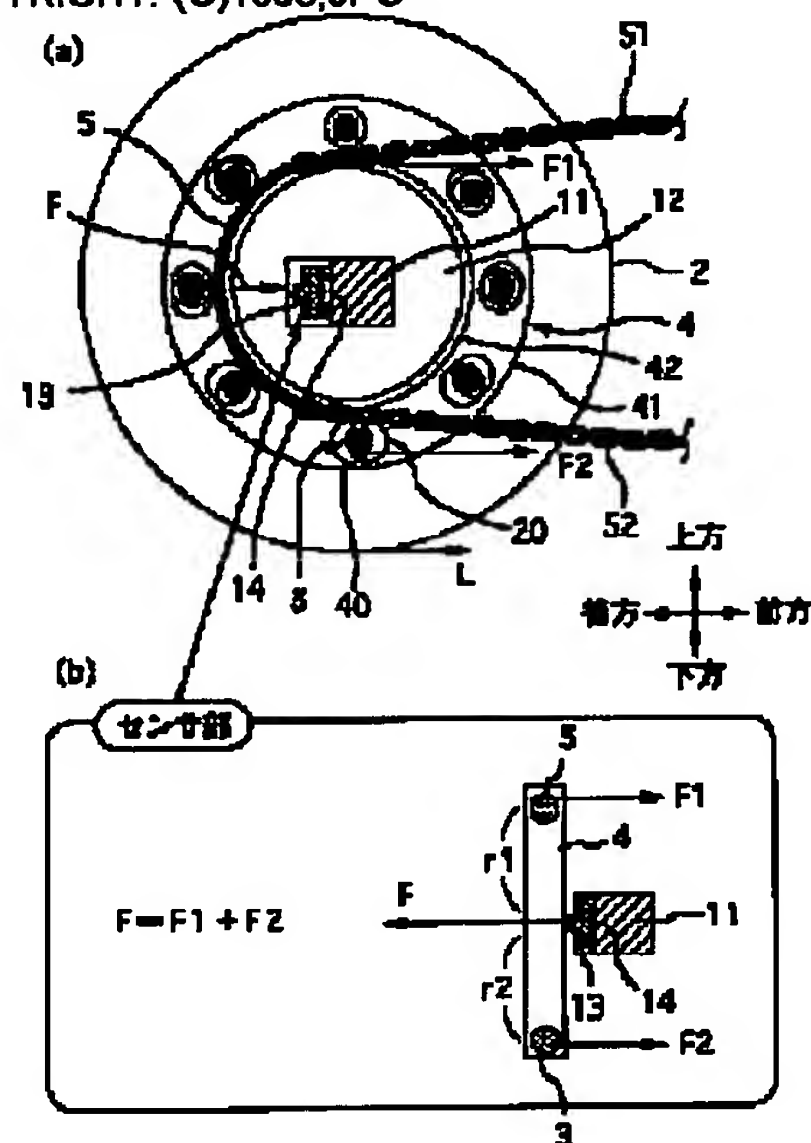
(54) **ROTATING TORQUE SENSOR**

(57) Abstract:

PROBLEM TO BE SOLVED: To provide a torque sensor simple in constitution, light-weight, compact and low in cost.

SOLUTION: This torque sensor has a fixed shaft 11, a driven rotor 2 journaled around the fixed shaft 11, a driving rotor 4 held to the driven rotor 2 movably in a specified range within the plane of rotation and rotatory-driven receiving tangential force F_1 from a chain 51 at the outer peripheral surface of a sprocket 42 so as to rotatory-drive the driven rotor 2, a non-rotating body 12 held to the fixed shaft 11 movably in a longitudinal direction in a specified block without being rotated in relation to the fixed shaft 11 and journaled the driving rotor 4 rotatably, and sensors 13, 14 for measuring pressing force F acting between the non-rotating body 12 and the fixed shaft 11. Resultant force of tangential force F_1 and reaction F_2 received from the driven rotor 2 through a joint pin at a lowest part is applied to the driving rotor 4 and detected by the pressing force sensors 13, 14 through the non-rotating body 12 to compute torque.

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